



UNITED STATES PATENT AND TRADEMARK OFFICE

M.A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,838	08/28/2003	Takashi Yamada	325772032900	7149
25227 7590 10/09/2007 MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 400 MCLEAN, VA 22102			EXAMINER GRAINGER, QUANA MASHELL	
			ART UNIT 2852	PAPER NUMBER
			MAIL DATE 10/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/649,838

Applicant(s)

YAMADA, TAKASHI

Examiner

Quana M. Grainger

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7-11-2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 11-13, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 10 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8-28-2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7-20-2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the circuit board mounted to said power supply unit using at least two different mounting orientations and that changes the current path depending on the orientation in which said circuit board is mounted must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Art Unit: 2852

2. Claims 1-16 are objected to because of the following informalities. Claim 1 recites a circuit board mounted to a power supply unit using at least two different mounting orientations and that changes the current path depending on the orientation in which it said circuit board is mounted. However, it is unclear how the circuit board can be mounted to a power supply in two configurations at the same time. The specification discusses two power supply units being connected to the circuit board. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 9, 11, 13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Okuda (applicant cited JP09-329982A). The electric apparatus by Okuda comprises: a power supply unit that has terminals to supply power to a circuit board; and a circuit board that can be mounted to said power supply unit using at least two different mounting orientations and can change the current path depending on the orientation with which it is mounted (abstract). The power consumed by said circuit board can be changed depending on the direction in which it is

Art Unit: 2852

mounted to said power supply unit (figures 1, 4). The power consumed by said circuit board can be maintained at a constant level by changing the orientation in which said circuit board is mounted to said power supply unit based on the voltage impressed by said power supply unit to said circuit board (abstract; figures 1, 4).

5. Claims 1-5, 9, 11-13, and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Tagashira (applicant cited JP07-142148A). The electric apparatus by Tagashira comprises: a power supply unit that has terminals to supply power to a circuit board; and a circuit board that can be mounted to said power supply unit using at least two different mounting orientations and can change the current path depending on the orientation with which it is mounted (abstract).

The power consumed by said circuit board can be changed depending on the direction in which it is mounted to said power supply unit (figures 1, 4). The power consumed by said circuit board can be maintained at a constant level by changing the orientation in which said circuit board is mounted to said power supply unit based on the voltage impressed by said power supply unit to said circuit board (abstract; figures 1, 4). The output of the heater can be maintained at a constant level by changing the orientation in which said circuit board is mounted to said power supply unit based on the voltage impressed by said power supply unit to said circuit board.

The heater includes two heating elements, such that the connection between the two heating elements may be switched between series connection and parallel connection by changing the orientation in which said circuit board is mounted to said power supply unit. The output of

Art Unit: 2852

the heater can be changed depending on the direction in which it is mounted to said power supply unit (abstract). The circuit board includes a plurality of connection points at which said circuit board is connected to said power supply unit, and two circuit elements that are installed between the connection points, such that the connection between the two circuit elements may be switched between series connection and parallel connection by changing the orientation in which said circuit board is mounted to said power supply unit (abstract).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tagashira.

Tagashira does not teach an inductive heating element. The examiner takes official notice that it is known in the art to use an inductive heating element in a fixing device. It would

Art Unit: 2852

have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Tagashira with an inductive heating element to obtain a heater capable of being used in common in response to power supplies with different voltages (abstract: lines 1-5).

Allowable Subject Matter

9. Claims 7-8, 10, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments filed 7-11-2007 have been fully considered but they are not persuasive.

Applicant argues that neither reference teaches two different mounting orientations for a circuit board. Instead, the English translation of Tagashira discloses a device having different power supply voltage ratios that the purchaser of the device can select by a "switching means." However, the recitation is under objection because it is not support by applicant's specification and it is unclear.

Applicant argues that a circuit board that can be mounted to a power supply unit using at least two different orientations. The current path can be changed depending on the orientation of the circuit board mounting. The claimed mounting "orientations" are illustrated in Figures 6 and 7, and discussed in paragraphs [0062] - [0072]. Applicant's disclosure makes clear that the claimed mounting orientation refers to the position of the circuit board, rather than alternate electrical connections running to a number of circuit boards. However, the figures and the specification do not limit the mounting orientations. All claimed subject matter must be clearly

Art Unit: 2852

shown. Applicant does not shown plural mounting orientation for the circuit board to a power supply. A power supply is not shown.

Applicant argues that neither Okuda nor Tagashira teaches two different mounting orientations for a circuit board. Both teach two different mounting orientations for a circuit board just as the specification and the drawing teach two different mounting orientations for a circuit board in the instant invention.

The claims remain rejected as discussed above.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quana M. Grainger whose telephone number is 571-272-2135. The examiner can normally be reached on 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/649,838

Page 8

Art Unit: 2852

A handwritten signature in black ink, appearing to read 'Quana M Grainger', with a stylized, flowing script.

Quana M Grainger
Primary Examiner
Art Unit 2852

QG